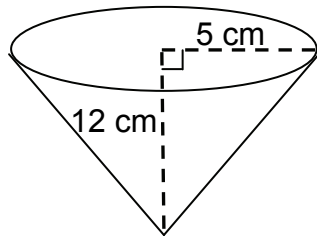




- 1 Jason made a cone from a sheet of paper.



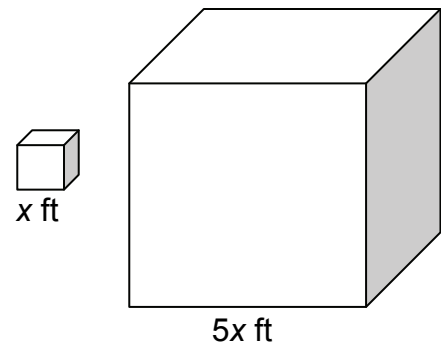
What is the volume of the cone?

- A 60 cm^3
- B 125.6 cm^3
- C 314.0 cm^3
- D 942.0 cm^3
- 2 A sphere has a radius of 6 inches. If the radius of the sphere is increased to a length of 18 inches, how would this affect the volume?
- A The volume of the larger sphere would be 27 times the volume of the smaller sphere.
- B The volume of the larger sphere would be 9 times the volume of the smaller sphere.
- C The volume of the larger sphere would be 6 times the volume of the smaller sphere.
- D The volume of the larger sphere would be 3 times the volume of the smaller sphere.

- 3 A beach ball has a radius of 3 centimeters. What is the approximate amount of air in the ball?

- A 12.56 cm^3
- B 37.68 cm^3
- C 84.78 cm^3
- D 113.04 cm^3

- 4 The dimensions of 2 cubes are shown below.



The volume of the large cube is 1000 cubic feet. What is the volume of the small cube?

- A 5 cubic feet
- B 8 cubic feet
- C 40 cubic feet
- D 200 cubic feet



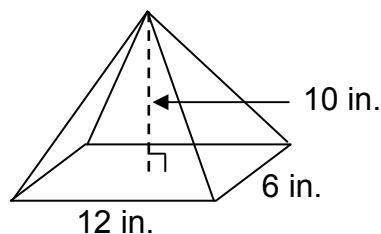
- 5 Tracy has a small flower box shaped like a rectangular prism. She wants to build a new flower box that is similar to the one she already has. The dimensions of the new flower box will be twice the dimensions of the small flower box. If the small flower box holds 16 cubic feet of soil, how many cubic feet of soil will the new flower box hold?

A 32 cubic feet
B 64 cubic feet
C 128 cubic feet
D 256 cubic feet

- 6 Jennifer must fill a cylindrical container with a solution for a science lab activity. The container is 6 inches tall and has a diameter of 2 inches. What is the approximate amount of solution Jennifer can put in the container?

A 12.00 inches³
B 18.84 inches³
C 37.68 inches³
D 75.36 inches³

- 7 What is the volume of the figure below?



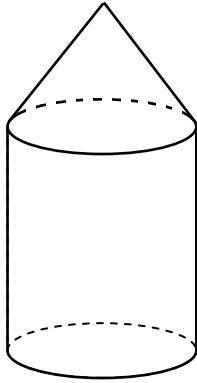
A 240 in.³
B 360 in.³
C 480 in.³
D 720 in.³

- 8 Joshua has a rectangular swimming pool in his backyard. The pool measures 20 feet in length and 14 feet in width. If he fills the pool to a depth of 6 feet, how many cubic feet of water will be in the pool?

A 40 ft³
B 280 ft³
C 840 ft³
D 1680 ft³



- 9 A concession stand at the zoo sells frozen fruit drinks in a container similar to the one shown below.



Which procedure could be used to find the amount of fruit drink the container can hold?

- A Find the volume of the cone then subtract the volume of the cylinder.
- B Find the volume of the cone then add the volume of the cylinder.
- C Find the surface area of the cone then subtract the surface area of the cylinder.
- D Find the surface area of the cone then add the surface area of the cylinder.
- 10 A small cylinder has a volume of 15.7 cubic inches. A large cylinder has dimensions that are 4 times the dimensions of the small cylinder. What is the volume of the large cylinder?
- A 62.8 cubic inches
- B 188.4 cubic inches
- C 251.2 cubic inches
- D 1,004.8 cubic inches
- 11 The dimensions of a small pyramid are $\frac{1}{2}$ the dimensions of a large pyramid. If you know the volume of the large pyramid, how could you find the volume of the small pyramid?
- A Multiply the volume of the large pyramid by $\frac{1}{2}$.
- B Multiply the volume of the large pyramid by $\frac{1}{6}$.
- C Multiply the volume of the large pyramid by $\frac{1}{8}$.
- D Multiply the volume of the large pyramid by $\frac{1}{16}$.